**Population Pyramids**

Create pyramids for following data. Label the pyramids appropriately (number pyramid, pyramid of productivity, pyramid of biomass)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Number Pyramid | Biomass Pyramid  (kJ m-2) | Productivity Pyramid  (kJ-2/yr) |
| Primary Producers | 100,000 | 2,500 | 500 |
| Primary Consumers | 10,000 | 200 | 50 |
| Secondary Consumers | 2,000 | 15 | 5 |
| Tertiary Consumers | 500 | 1 | -- |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Number Pyramid | Number Pyramid | Biomass Pyramid  (g m-2) | Biomass Pyramid  (g m-2) |
| Primary Producers | 1,500,000 | 1 | 807 | 4.0 |
| Primary Consumers | 200,000 | 2,000 | 37 | 21.0 |
| Secondary Consumers | 9,000 | 90 | 11 | -- |
| Tertiary Consumers | 1 | 1 | 1.5 | -- |

**Things to look at in Ecological Pyramids:**

* **The concentration of toxic substances in food chains**
* **The vulnerability of top carnivores**
* **The limited length of food chains**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Pyramid** | **Units** | **Description** | **Pros and Cons** |
| Pyramid of Numbers | a number |  | Pros:  Cons: |
| Biomass Pyramid | g m-2 (land)  g m-3  (liquids)  J (energy content) |  | Pros:  Cons: |
| Pyramid of Productivity | Jm-2/yr |  | Pros:  Cons: |